OFFICE OF RESEARCH AND DEVELOPMENT HAZARDOUS SUBSTANCES TECHNICAL LIAISON REGION 9 NEWSLETTER

Summer 2006, Edition 36

The World Cup is over (Forza Italia!), we're at the end of this year's Tour de France (oh, what a great Tour it was), and oh yeah.....the All Star game of baseball just happened (yea, American League!). That means summer is here again, so.....Welcome to the Summer 2006 edition of the Region 9 HSTL Newsletter! While other interests keep us going outside our workaday world, there are still plenty of interesting things happening in our world of hazardous waste cleanup. I've collected another batch of new documents, upcoming workshops, stories of local and national interest, and plenty more. Read on for more details!

This quarter, I've included information on a technology for GAC regeneration, summaries of a few recent conferences (NARPM, a Nanotechnology Symposium and the recent Battelle Conference), background on an opportunity for technical support from the US Army Corps of Engineers, and the usual offerings on upcoming conferences and new documents.

If you're an EPA'er, please take advantage of the local technical support available to you, both in your Regional office and from the ORD labs. ORD has technical support available for site characterization and monitoring, groundwater issues, engineering and treatment technologies, aerial photography, and more. Don't hesitate to call me for details. But more importantly, enjoy your summer!

Mike Gill
EPA Region 9
ORD Hazardous Substances Technical Liaison
415-972-3054

Summer 2006 Edition of the Region 9 HSTL Newsletter:

NATIONAL NEWS

New Tools and Technologies

Landfill Gas Emission Data: Help for Municipalities
(From EPA's NRMRL News - June 7, 2006)

From an air quality perspective, a municipality might be defined as a body of land surrounded by pollution emissions. These may arise from single sources such as smokestacks or from "wide-area" sources such as solid waste landfills. Single-source emissions are relatively well-characterized and thus, easier to control. But solid waste

landfills are a special challenge because of the multiple pathways through which gas can migrate from landfills and the complex gas mixtures created by decomposing wastes. EPA ranks landfills as the leading source of methane gas in the U.S.; other landfill gases include carbon dioxide, hydrogen sulfide, traces of volatile organic compounds (solvents, fuels, paint additives) and hazardous air pollutants (benzene, vinyl chloride, naphthalene). EPA air quality scientists are conducting ongoing research to characterize landfill gases using a variety of techniques to measure gas emission rates. One of these technologies, optical remote sensing, uses the unique absorption of invisible light waves by pollutants to identify and determine their concentration profiles--both vertically (to determine mass flux) and radially (to identify hot spots). Research results have been published in a series of EPA reports designed to assist municipalities in the management of the potential risk of landfill gas explosions and risk to human health risk from inhalation of toxic emissions. Research data will also be of help to EPA Regions, states, on-scene coordinators, and others responsible for evaluating landfill gas emissions.

According to the intriguing EPA historical timeline, "Milestones in Garbage," the city of Athens organized the Western world's first municipal dump 500 years before the Christian era. In the years since then, municipal sold waste problems have loomed so large that, in 2000, EPA established a link between solid waste emissions and global climate change. In spite of this growing problem, municipalities often lack reliable, site-specific data to manage health and safety risks, particularly for older landfills. EPA air quality researchers in coordination with state, local, and regional regulatory authorities, are providing the sound science needed to fill the data gaps that will identify landfill hot spots and quantify mass emission rates for pollutants of concern. More than 30 air toxics have been identified in landfill gas, but more site-specific data are needed to answer questions such as: what data are adequate to develop representative emission factors, and what are the best management practices for minimizing gas loss? Researchers are working to answer these questions through the use of field measurements, optical remote sensing with radial and vertical scans, analysis of raw landfill gas and combustion byproducts, organo-mercury analysis (for the presence of metals in raw landfill gas), and particulate-matter analysis.

Since 2003, EPA's Office of Research and Development landfill gas characterization research has conducted measurements at 15 wide-area sites including municipal landfills, wet/bioreactor landfills, Superfund landfills, and Brownfields (abandoned industrial property). This work has resulted in a series of publications and workshops. Here is a sampling:

- Landfill Gas Emission Model (LandGEM)--Software and Manual (EPA-600/R-05/047, May 2005)
- Guidance for Evaluating Landfill Gas Emissions from Closed or Abandoned Facilities (EPA-600/R-05/123)
- Three Case Studies Demonstrating U.S. EPA Guidance for Evaluating Landfill Gas Emissions from Closed or Abandoned Facilities--Bush Valley Superfund Landfill, Abingdon, Maryland (EPA/600/R-05/143); Rose Hill Regional Landfill, Kingstown,

Rhode Island (EPA/600/R-05/141); and Somersworth Sanitary Landfill, Somersworth, New Hampshire (EPA/600/R-05/142)
- First-Order Kinetic Gas Generation Model Parameters for Wet Landfills (EPA/600-R-05/072)
- Measurement of Fugitive Emissions at a Landfill Practicing Leachate Recirculation and Air Injection (EPA/600-R-05/088, June 2005)

Workshops and technology demonstrations based on this research have also been presented to representatives from industry, academia, EPA regional offices, and state and local governments. Applications of these research results will be of help to all specialists with responsibility for evaluating landfill gas emissions, for land use policy decisions, emission inventories, or for responding to applicable regulatory requirements.

For further information, contact Patricia Schultz, NRMRL Office of Public Affairs, 513-569-7966, or email to schultz.patricia@epa.gov.

Environmental Knowledge and Assessment Tool (EKAT)
(Courtesy of Jeff Heimermann and Tech Direct)

The development of the Environmental Knowledge and Assessment Tool (EKAT) was funded by the U.S. Marine Corps. The goal of EKAT is to help remediation and hazardous waste professionals save time and effort working on projects related to remediation, brownfields, site characterization, hazardous waste, and clean up issues. EKAT contains a wealth of centralized regulatory information. There are online tools to screen chemicals for federal and state regulatory information, including CERCLA, RCRA, CAA, and CWA. You can get NIOSH REL and OSHA PEL information for chemicals in air. EKAT also includes Hazardous Waste Guides, Physical and Chemical Properties Guides and Toxicology Guides to help with risk assessments. EKAT summarizes, categorizes and links to highly useful resources on: major federal regulations such as CERCLA and RCRA, as well as on environmentally pertinent topics such as Coatings, Explosives Safety, the Federal Facilities Compliance Act (FFCA), Military Munitions Rule (MMR), and Solvents Alternatives. Quick access to online resources such as TOXNET, EPI Suite, and the Periodic Table increases efficiency in finding information. Register on the EKAT demo site to test out the system.

For more information and to register please visit:
http://www.ekat-tool.com/demo/intro/index.html .

Extending MNA and PRBs – AFCEE Assesses Abiotic Role in Enhanced In Situ Bioremediation (From the Air Force Center for Environmental Excellence [AFCEE] Technology Transfer Update)

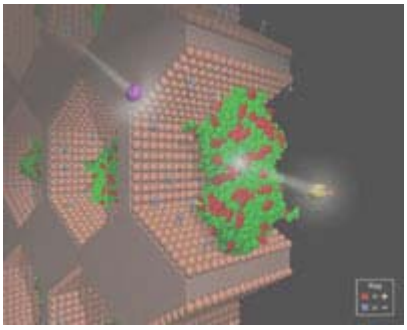
As an extension to monitored natural attenuation (MNA) and enhanced in situ bioremediation (EISB) of chlorinated solvents, AFCEE and its partners are investigating the potential contribution of abiotic processes in these two successful site remediation technologies. Coined by some as biogeochemical reductive dechlorination (BiRD), AFCEE has investigated the potential for abiotic contributions at three Air Force sites as part of its EISB initiative. Depending on the naturally occurring aquifer conditions, levels of naturally occurring iron and/or sulfate were augmented to stimulate the production of iron sulfides to stimulate BiRD at the sites.

These efforts are holding promise in extending the number of sites applicable to MNA and EISB. The most recent results from AFCEE's abiotic efforts were presented at the *5th International Conference on Remediation of Chlorinated and Recalcitrant Compounds* in Monterey, CA, in May 2006. For more information regarding AFCEE's MNA, EISB, and abiotic initiatives, contact the AFCEE Technology Transfer office.

For more information, contact afcee.td.awag@brooks.af.mil

Recent Conferences

Nanotechnology and OSWER - New Opportunities and Challenges - Symposium
July 12-13, 2006
Washington, DC



As we know, nanotechnology is more than a passing fad. This term, used to define a broad range of disciplines, can be summed up as the use or manufacture of extremely small particles for application to products or processes. The field offers huge technical gains, business opportunities, and the road to improved products. But it also poses a number of challenges to regulatory agencies, including EPA, because of potential environmental impacts, both human health and ecological. An EPA OSWER Symposium was recently held to help EPA better understand these new issues, and ask

the right questions before applying any regulations to industry. EPA has been involved with nano to some degree already, but is trying to learn all it can and at the same time, be cautious about these future challenges. The symposium offerings included the following session topics:

Life Cycle of Nanomaterials
Potential Exposure Scenarios and Potential Toxicity of Nanomaterials
Detection and Characterization of Nanomaterials in the Environment
Fate and Transport of Nanomaterials
Waste Management of Nanomaterials
Review of Regulations, Positions, Policies, Guidance and Actions for Nanomaterials

Proceedings are not posted yet, but if interested, I can get those to you when they are available (gill.michael@epa.gov).

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Battelle Conference On Remediation Of Chlorinated And Recalcitrant Compounds
May 22-25, 2006
Monterey, CA

A number of EPA folks attended this widely attended annual conference back in May. With 7 concurrent sessions, there were many topics to choose from over the duration of the conference. Below is a list of some of the topics covered. More information, as seen through the eyes of some EPA colleagues, can be found in this white paper available at this EPA intranet website (sorry, no access for non-EPA folks):
http://intranet.epa.gov/ospintra/scienceportal/source/NOTES%20FROM%20BATELLE%20CONFERENCE.pdf .

In this white paper, they discuss what they heard on the following topics:

MGP and NAPL recovery
Bioremediation
Source Zone Remediation
Optimization
MNA and DNAPL
Combining Remedial Technologies
Vapor Transport
Isotopes
NAPL/DNAPL Delineation
Metric for source zone

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NARPM Annual Conference
June 19-23, 2006
New Orleans, LA

The National Association of Remedial Project Managers (NARPM) held its annual conference in New Orleans from June 19th-23rd. It was held in conjunction with the Technical Support Project and the Branch Chiefs meetings. As usual, the NARPM meeting offered many useful topics through panels, papers and information sessions. A small subset of the available offerings included the following (which I attended):

DNAPL Remediation
Wastewater Treatment Fundamentals
Remedial Technologies Overview
Post-Construction of Ground Water Remedies
Vapor Intrusion - Assessment Update
Design and Construction Issues

Along with Region 4's HSTL, Felicia Barnett, I provided an update on the HSTL program to the Ground Water Forum. I also presented during a plenary session on various online resources in a talk titled: "Hazardous Waste Cleanup Technology Resources". Presently, these materials can be viewed at the following web address: http://intranet.epa.gov/ospintra/scienceportal/htm/hstlactivities.htm#headline .

These materials and more will be posted on the NARPM website in the near future. The address is: http://www.epanarpm.org/narpm2006/home.htm .

For more on the NARPM conference, please contact your Regional NARPM rep or visit the website.

Technical Support Available from US Army Corps of Engineers

In the world of tech support, we in Superfund are very fortunate. We have assistance from our in-house regional tech support, the ORD labs (I can help with that!), as well as contractual help. Recently, I found out that we have one other possible option with support from the US Army Corps of Engineers. Ken Skahn of EPA HQ recently sent out a notification that Superfund technical support is available from the Army Corps of Engineers. He is the Superfund program's liaison to the Corps. This is support available at no-cost to EPA RPMs. It should be said that to avoid any potential conflict-of-interest, this support only makes sense for non-DoD sites and where the Corps is not already involved in some capacity.

The type of assistance that the Corps is offering covers 5-year review reports, Value Engineering policy, Direct Cite contractor payment policy, real estate acquisition, etc. The EPA/Corps web sites below explain the wide variety of technical support and Ken is willing to assist you if have any questions. He can be reached at 703-603-8801. Thanks for the tip, Ken!

USACE/EPA Web Site (Take a look at the many topics addressed)

http://hq.environmental.usace.army.mil/epasuperfund/index.html

USACE Center of Expertise - Specialists List (Look here for who to call to get free help with your technical questions)
http://hq.environmental.usace.army.mil/epasuperfund/index.html

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Value Engineering in Superfund

Back in April, a memo below was signed by Superfund Office Director Mike Cook, which reaffirmed the Superfund program's policies on value engineering at Fund-lead Superfund sites. The memo outlined when a value engineering study should be completed and when a value engineering screen should be conducted. If you have questions on implementation of this policy, the OSRTI staff expert is Ken Skahn. Ken can be reached at (703) 603-8801 and e-mail skahn.ken@epa.gov.

Value Engineering (VE) is a highly beneficial technique used to reduce nonessential procurement and program costs. VE uses systematic and creative methods to reduce costs without sacrificing the reliability, efficiency, or original objectives of the project. In accordance with a federal (FAR) requirement, all RA and Long Term RA (LTRA) contracts above $100,000 should contain Value Engineering Change Proposal (VECP) provisions. These VECP provisions afford contractors a substantial financial incentive (roughly 50%) for cost savings proposals that are accepted by the government and incorporated into a project. Compared to the 100% VE cost savings during RD, the government will then be the beneficiary of somewhat less than 50% of the VE cost savings during RA.

Other information on Value Engineering can be found in the following fact sheet:

Value Engineering (For Fund-Financed Superfund Remedial Design / Remedial Action Projects) OSWER 9355.5-24FS
(Sorry - no weblink is available)

LOCAL NEWS

Technical Information Exchanges on Landfill Closure in Region 9 (With assistance from ORD's Ken Sala)

One of the landfills discussed, the Operating Industries Landfill, California

Following a general request, two informal information exchange meetings were recently held in Region 9 on the topic of closure practices at landfills. Both meetings were technical in nature. Regional staff worked together to identify landfill issues and generate questions for discussion. We had phone attendance by ORD researchers, non-EPA landfill experts and staff from the Office of Solid Waste and Emergency Response (OSWER). This allowed the Region 9 attendees a unique opportunity to ask direct questions of experts and get direct feedback in a small setting.

In the first meeting, ORD researchers Dave Carson, Thabet Tolyamet, and Steve Rock, along with Kelly Madalinski of EPA's Office of Superfund Remediation and Technology Innovation discussed current ORD research and guidance, including the long term performance guidance, released in 2002:

Assessment and Recommendations for Improving the Performance of Waste Containment Systems, December 2002
http://www.epa.gov/ORD/NRMRL/pubs/600r02099/600r02099.htm) .

The presenters discussed how ORD is presently working on these issues: performance of GCLs and cover systems; National Academy of Science / OSWER collaboration on examination of waste containment systems; land-filling of construction demo material in Region 5; and work with the ITRC on bioreactors and alternative covers. Region 9 staff discussed eleven different landfill sites where closure presented challenging technical issues.

Group interest then turned to whether ORD had catalogued observed failures of landfill covers, liners and how this would be very helpful and applicable to 5-year reviews and performance monitoring design. Since pressure to redevelop closed landfills has become a driver on Regional responses to landfills, it was determined that the next technical session should focus on how to avoid failure in landfill closure.

A second meeting focused on technical and financial challenges, financial assurance, cap aging, and clean closure. These are the issues that environmental professionals see as the biggest challenges for avoiding failures at closing landfill sites. In addition to the EPA experts at the first meeting, we were fortunate to have two non-EPA landfill experts provide assistance. They were Ed Kavazanjian of Arizona State University and Greg Richardson of G.N. Richardson Associates, Raleigh, NC.

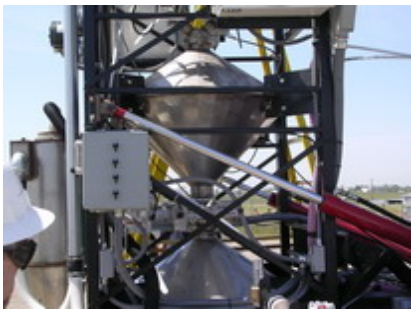
In these technical information exchanges, we were able to develop a greater understanding of the dynamics of landfill closure and start to think about how to respond to the Region's aging landfills. No proceedings are available from these meetings, but if you would like to discuss them in more detail, don't hesitate to contact Mike Gill (gill.michael@epa.gov).

Superfund Basic Research Program: Phase II GAC Microwave Regeneration System

In mid-May, Region 9 reps visited the McClellan Park site in Sacramento (the former McClellan Air Force Base) to see a technology demonstration that is being funded by the Superfund Basic Research Program out of the National Institute of Environmental Health Sciences (NIEHS). The technology uses microwaves to regenerate carbon used in an SVE system. This was a process that some folks saw as a Phase I study back a couple of years ago, both in late 2003 and in October, 2004 as part of the field trip during the Superfund Tech Support Project meeting in Sacramento. The system has since been scaled up as a Phase II and now has more throughput and is mobile. The next step for the developer is to try and commercialize the unit, either through selling services to sites or as a stand-alone system for sale.

From the abstract: "The main objective of the SBIR Phase II work in the first year was to design, construct and test a field-ready mobile 50 kg/hr microwave carbon regenerator. In the second year the prototype microwave reactor system will be transported to three selected sites and operated to demonstrate that the microwave technology is a cost-effective commercial solution for recovering VOCs from a number of different sites. Using the field demonstration test results, technical and economic feasibility of the microwave technology will be assessed."

Microwave units on tower



Microwave tower with hydraulic lift

Knockout tank for recovered liquids

In summary, the technology:

- can regenerate carbon at a rate of 100 pounds per hour,
- allows for carbon reuse,
- avoids incineration and disposal,
- is portable (on a trailer truck bed),
- allows liquid recovery from the GAC, and
- appears to be cost beneficial, as calculations have shown that at $0.63/lb., it is about 1/3 the cost of a standard carbon changeout.

Here is a link to a number of photos that were taken that day at the technology demo: http://share.shutterfly.com/action/welcome?sid=8AZNmzJi3aNmJv

Questions were posed regarding emissions from the system. The developer said that *"the mobile microwave unit does not have any air emissions, therefore, there is no way for air emissions to be tested. The VOC gases and nitrogen gas are contained in the outlet gas from the microwave regeneration reactor. The VOC gases are condensed and separated in the liquid knockout pot. After VOC gases are condensed, nitrogen is recycled back to the microwave reactor. The liquid is drained from the collection vessel. Since the system is completely enclosed, there are no emissions."*

Regarding tests on the regenerated carbon, the question was asked what you typically see, and what are you aiming for with respect to a particular iodine or butane number as a measure of activation level? They *"measure the iodine number and adsorption capacity of the regenerated carbon. The developer would like to see the working adsorption capacity of regenerated carbon remains at the same values, close to the fresh carbon, as the regeneration cycle increases. The iodine number of the regeneration carbon should be greater than the 600 m2/g that will provide a complete removal of VOCs and other hydrocarbons from SVE gas."*

For more information on the technology, contact Dr. Chang Cha of Cha Corporation at (307) 742-2829 or <ccha@chacorporation.com>.

Pilot Tests Lead to Expanded ISCO for Vadose-Zone Remediation

(Courtesy of Technology News and Trends, July, 2006)

Following successful pilot-scale field testing of in-situ chemical oxidation (ISCO) in 2001, the USAF began an expanded-scale application in 2003 to remove chlorinated solvents from an upgradient source area at Air Force Plant 44 in Tucson, AZ. [For information on site conditions and details concerning the pilot test, see the January 2003 issue of Technology News and Trends.] During both the pilot and expanded operations, potassium permanganate solutions were injected to remove residual high concentrations of TCE from fine-grained alluvial sediments in the upper part of the regional aquifer.

(For complete article, see Technology News and Trends, July 2006, page 5. (http://www.clu-in.org/download/newsltrs/tnandt0706.pdf)

Contributed by George Warner, USAF (george.warner@wpafb.af.mil or 937-255-3241) and Timothy J. Allen, Raytheon (tjallen@raytheon.com or 520-794-9450).

DATEBOOK - UPCOMING EVENTS

This section of the newsletter is an attempt to present both EPA and non-EPA sponsored environmental technology related courses and conferences. But being a quarterly publication, it is impossible for this newsletter to always be up-to-date. For the most pertinent information on upcoming EPA courses, see http://www.trainex.org. These events are listed chronologically.

Many of the entries in these newsletters are from TIO's "TechDirect" emails (thank you Jeff Heimerman!). TechDirect prefers to concentrate mainly on new documents and the internet live events. However, they do support an area on the CLU-IN webpage where announcement of conferences and courses can be regularly posted. Sponsors can input information on their events at http://clu-in.org/courses . Likewise, the page has an area for upcoming events that might be of interest. It allows users to search events by location, topic, time period, etc.

Many of you know that www.clu-in.org routinely place seminars in the CLU-IN Studio archive after they have aired. This provides access to the slides and the audio file for each presentation. Some of you requested that we make these audio files more portable. Now they have done that. For more recent seminars, you now have the option to download them in MP3 format which will allow you to listen via portable music players.

You may also subscribe to their podcast feed, which will alert you when new seminar archives are available. For more information, see http://clu-in.org/live/archive.cfm .

New CLU-IN Training Area. A new training section has been posted to CLU-IN. The new Training page offers visitors a quick glimpse of upcoming training opportunities in a monthly view as well as a running list of events. Links to upcoming Conference Webcasts, Trainex and Archived Internet Seminars and Podcasts are available on the new Training Page. See: http://www.cluin.org/training .

ITRC Internet Based Training

These are typically 1-2 hour online courses where the participant follows a webpage presentation, while listening on the phone. Check - http://www.itrcweb.org or http://www.clu-in.org/studio/seminar.cfm for times and registration.
NOTE: All dates/times are subject to change – check http://www.itrcweb.org for the most up-to-date information.

July 27th - *What is Remediation Process Optimization and How Can It Help Me Identify Opportunities for Enhanced and More Efficient Site Remediation?* (11:00 a.m. to 1:15 p.m. EASTERN Time)

Aug. 3rd - *An Overview of Direct Push Well Technology for Long-term Groundwater Monitoring* (11:00 a.m. to 1:15 p.m. EASTERN Time)

Aug. 10th - *Radiation Risk Assessment: Updates and Tools* (11:00 a.m. to 1:15 p.m. EASTERN Time)

Conference on Mercury as a Global Pollutant

Madison, Wisconsin

August 6-11, 2006

www.mercury2006.org

The Future of Agriculture: Science, Stewardship, and Sustainability

August 7-9, 2006

Sacramento, CA

http://www.dce.ksu.edu/dce/conf/ag&environment/

2006 Midwestern States Risk Assessment Symposium
August 21-24, 2006
Indianapolis, IN
http://web.e-enterprise.purdue.edu/wps/portal/Environment/msras

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Multimodal Training Seminars
Department of Transportation's Pipeline and Hazardous Materials Safety Administration (PHMSA)
August 22-23, 2006
Chicago, IL
http://hazmat.dot.gov/training/training.htm

22nd Annual National Environmental Monitoring Conference
Aug 28-30, 2006
Arlington, VA
Contact: Shannon Sturgeon (703) 605-0509

Nanotechnology for Site Remediation
September 6-7, 2006
Chicago, IL (EPA Region 5)
For more info, call Charles Maurice at 312-886-6635

PCBs Workshop 2006
Date: September 6-10, 2006
Location: Zakopane, Poland

American Chemical Society National Meeting
September 10-14, 2006
San Francisco
http://www.chemistry.org/portal/a/c/s/1/acsdisplay.html?DOC=meetings\sanfrancisco2006\home.html

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GROUNDWATER RESOURCES ASSOCIATION o f C a l i f o r n i a
Model Calibration and Predictive Uncertainty Analysis Using PEST
September 13-15, 2006
San Francisco, CA
http://www.grac.org/pest.asp

"Nanoparticle Dosimetry, Toxicology and Cellular Interactions" (during International Aerosol Conference)
September 13-16, 2006
St. Paul, MN
http://www.aaar.org/meetings/IAC2006/index.htm

Second Biennial Central and Eastern European Environmental Health Conference (CEEHC)
September 17-20, 2006
Bratislava, Slovakia
http://tti.tamu.edu/conferences/ceehc/

WASTECON 2006

September 19-21, 2006

Charlotte, NC

http://www.wastecon.org

First International Conference on
DNAPL CHARACTERIZATION AND REMEDIATION
September 25-28, 2006
Pittsburgh, PA
http://www.redoxtech.com

Understanding Migration, Assessment, and Remediation
of Nonaqueous Phase Liquids
September 27-29, 2006
San Francisco, CA
http://www.ngwa.org/pdf/e/course/311sep06.pdf

22nd Annual International Conference on Soils, Sediments and Water

University of Massachusetts Amherst

October 16-19, 2006

http://www.umasssoils.com/

ASTSWMO Annual Meeting
October, 2006 (exact dates TBD)
Location: TBD
Contact: Allen Pearce (202) 308-8638
http://astswmo.org

The Northwest Environmental Training Center presents: Contaminant Chemistry and Transport in Soil and Groundwater
October 18 - 19, 2006
Sacramento, California
http://www.nwetc.org/chem-403b_10-06_sacramento.htm

EPA Land Revitalization Summit
Oct 30 - Nov 1, 2006
Austin, TX
(no other info found)

NATIONAL SBIR FALL 2006 CONFERENCE
Nov. 6-9, 2006
Milwaukee, WI
http://www.sbirworld.com/conferences/eventDetails.asp?mnuConf=1&confId=1648&fromPg=home

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Brownfields Conference
Nov 13-16, 2006
Boston, MA
http://www.brownfields2006.org/en/index.aspx

US EPA Fall Tech Support Project Meeting

Long Beach

Nov 13-17, 2006

http://www.epa.gov/tio/tsp/meetings.htm

Hard Rock 2006 - Sustainable Modern Mining Applications

Nov 14-16, 2006

Tuscon, AZ

http://www.epa.gov/hardrockmining/hardrock/hardrock2006.htm

Partners in Environmental Technology Technical Symposium & Workshop

November 28-30, 2006

Washington, D.C.
http://www.serdp.org/Symposium#UpcomingPartners
http://www.estcp.org/calendar/related-events.cfm#upcomingSymp

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Byproduct Beneficial Use Summit
November 19 - December 1, 2006
San Francisco, CA
Contact: Elise Hunter (415) 972-3290

International Conference on Nanotechnology Occupational and Environmental Health and Safety: Research to Practice
December 4-7, 2006
Cincinnati, OH
http://www.cincyusa.com/noehs/

AEHS 17TH ANNUAL WEST COAST CONFERENCE ON SOILS, SEDIMENTS, AND WATER

MARCH 19-22, 2007

MISSION VALLEY MARRIOTT

SAN DIEGO, CA
http://www.aehs.com/conferences/westcoast/index.htm

A&WMA's 10th Annual Conference
June 26-29, 2007
Pittsburgh, PA
http://www.awma.org/events/FutureACE/default.asp

WEB PAGES

(Thanks to Jeff Heimerman and TechDirect for these items.)

CLU-IN Issue Areas

A new Issue Area feature has been added to CLU-IN. EPA understands that site owners and other parties involved in remedial activities need information on emerging issues. CLU-IN Issue Areas bundle available information associated with selected topics. They draw upon existing resources from the CLU-IN Web site, but also from other sources of information that were not previously cited or available on CLU-IN. These topics are still being researched, and these issue areas will be updated with information from federal cleanup programs, state sources, universities, nonprofit organizations, peer-reviewed publications, and public-private partnerships. They welcome any suggestions you may have for new topics or additional resources. Currently the Issue Areas include sections on DNAPLs, Mining sites, Nanotechnology, Sediments, Vapor Intrusion and Wood Treater sites.

For more information, see http://clu-in.org/issues/ .

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New Triad Project Profiles

Triad project profiles contain information about completed and ongoing applications of the Triad at contaminated sites. Triad project profiles describe sites that use the elements of the Triad: systematic planning, real-time monitoring and measurement technologies, and dynamic work strategies. While the focus of the profiles is on sites that demonstrated all three components of the Triad, some of these sites exhibited only one or two aspects but are still useful examples. The Triad project profiles provide a summary of relevant site information, contaminants and media, project goals and outcomes, cost and time-

savings, detailed information on the Triad work performed at the site, as well as points of contact and electronic references. Five new profiles have been recently added.

For more information, see http://www.triadcentral.org/user/profile/index.cfm .

Dry Cleaner Virtual Tour

This slide presentation was developed by the State Coalition for the Remediation of Drycleaners. Spent drycleaning solvents have been found in soils and ground water in approximately three-quarters of existing or former dry cleaning facilities. Because these contaminants are difficult to remove, they present a substantial environmental challenge. You can take a virtual tour of the dry cleaning process which includes the cleaning and recycling of used cleaning solvents.

Go to http://www.drycleancoalition.org/tour/ .

RECENT DOCUMENTS, DATABASES, ETC.

These entries are arranged alphabetically. Thanks to TechDirect, Tech Trends, NRMRL News, the ETV Program, DOE, DoD and others for posting their latest documents. And remember, many of these are available in paper format in the Region 9 library. Use your local library.....or it may disappear. It's happening at EPA.....

Above Ground Treatment Technologies
(ITRC RPO-4)
(March 2006, 26 pages)
http://www.itrcweb.org/Documents/RPO-4.pdf

AFCEE and ITRC Team on Performance-Based Environmental Management
http://www.itrcweb.org/gd_RPO.asp

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- *Assessing Risks to Populations at Superfund and RCRA Sites: Characterizing Effects on Populations*
- *Non-Dioxin-Like PCBs: Effects and Consideration in Ecological Risk Assessment*
- *Memorandum: Response to Ecological Risk Assessment Forum Request for Information on the Benefits of PCB Congener-Specific Analyses.*

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- *Triad Speeds Cleanup of Lead-Contaminated Firing Range Soil*
- *Performance Based Criteria: A Panel Discussion*
- *Managing Decision Uncertainty*

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Serious Scientists Gather 'Round. . .

TI: The cloudy side of sunscreens
AU:
JN: Environmental Science and Technology
PD: 2006
VO: 40
NO: 5
PG: 1377
PB: ACS AMERICAN CHEMICAL SOCIETY
IS: 0013-936X
PE: MAR 01
URL: http://www.ingentaconnect.com/search/expand?unc=1061684544
Click on the URL to access the article or to link to other issues of the publication.

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(The birds finally have a chance after an oil spill.....)

TI: Achievement of 100% Removal of Oil from Feathers Employing Magnetic Particle Technology
AU: Dao, HV; Ngeh, LN; Bigger, SW; Orbell, JD
JN: Journal of Environmental Engineering
PD: 2006
VO: 132
NO: 5
PG: 555-559
PB: ASCE AMERICAN SOCIETY OF CIVIL ENGINEERS
IS: 0733-9372
URL: http://www.ingentaconnect.com/search/expand?unc=1062065071
Click on the URL to access the article or to link to other issues of the publication.

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TI: Chicken poop and arsenic Arsenic in chicken feed supplements may lead to surface-water and groundwater contamination
AU:
JN: Environmental Science and Technology
PD: 2006
VO: 40
NO: 9
PG: 2864

PB: ACS AMERICAN CHEMICAL SOCIETY
IS: 0013-936X
PE: MAY 01
URL: http://www.ingentaconnect.com/search/expand?unc=1062289862
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This quarterly newsletter publication is meant to be used for information only. It does not represent the opinion of the management of the regional or national offices of EPA, only that of the author. The accuracy of the information contained herein is not guaranteed, only desired. If corrections are necessary, please contact the author. Thanks again to all of my information resources, which include EPA's OSRTI (formerly TIO), ORD (including NRMRL News) and Region 1's CEIT.

Thanks for reading it! Comments and suggestions are appreciated. If you wish to be added to or deleted from this list, please send me an email. (gill.michael@epa.gov)

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A number of environmental technology web resources can be found here.....http://www.epa.gov/region09/waste/techlinks/
And don't forget the HSTL website.....http://www.epa.gov/osp/hstl.htm

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Mike Gill
ORD Hazardous Substances Technical Liaison
US EPA Region 9 / SFD-84
75 Hawthorne Street
San Francisco, CA 94105
415-972-3054
415-947-3520 (Fax)
Gill.Michael@epa.gov
